## Overview of CFR Part 107 FAA Practical Exam

The knowledge areas are as follows:

- 1. Applicable regulations relating to small unmanned aircraft system rating privileges, limitations, and flight operation.
- 2. Airspace classification, operating requirements, and flight restrictions affecting small unmanned aircraft operation.
- 3. Aviation weather sources and effects of weather on small unmanned aircraft performance.
- 4. Small unmanned aircraft loading.
- 5. Emergency procedures.
- 6. Crew resource management.
- 7. Determining the performance of small unmanned aircraft.
- 8. Physiological effects of drugs and alcohol.
- 9. Aeronautical decision-making and judgment.
- 10. Airport operations.
- 11. Maintenance and preflight inspection procedures.

## **Airspace Classification**

Controlled Airspace: Class B, C, D, E

Uncontrolled Airspace: Class G. Airspace not designated as Class B, C, D, or E.

Reading Aeronautical Charts

Special Use Airspace

- 1. Restricted areas
- 2. Warning areas
- 3. MOA's
- 4. MTR's
- 5. Parachute jump operations
- 6. Wildlife areas / Wilderness areas
- 7. TFR's
- 8. Cloud clearance and visibility requirements

#### **Weather Services**

Aeronautical Weather Reports and Forecasts

Weather Briefings, METARS, and TAFs

Weather Charts / 1800WXBRIEF

#### Weather

The atmosphere, pressure, density altitude, performance, wind, air masses, humidity, fronts, stability, temperature/dew point, clouds, thunderstorms

#### **Night Flying**

The eve

Visual limitations and illusions

**FLIR** 

#### Physiological effects and Aeronautical decision-making

#### Day One

0800-1000 Introduction of CFR Part 107, airspace classification, aeronautical charts, special use airspace, navigation, our COA and ECOA's.

1000-1200- METAR's, TAF's, and NOTAM's.

1200-1300- Lunch

1300- 1700- Practical flight exercises

#### Day Two

0800-1000- Review of airspace classification, aeronautical charts, special use airspace, navigation, COA and ECOA's.

1000-1200- Review of METAR's, TAF's, and NOTAM's.

1200-1300- Lunch

1300- 1700- Practical flight exercises

## **Day Three**

0800-1100- Weather

1100-1200- Night flying and FLIR

1200-1300- Lunch

1300- 1700- Practical flight exercises

## **Day Four**

0800-1200- CRM, ADM, physiological factors, aircraft loading and performance, overall review

1200-1300- Lunch

1300-1700- Practical flight exercises

## **Day Five**

Completion of hours and any incidental training.

**Day One** 0800-1200

Overview of what CFR Part 107 is and what it includes.

UAV / UAS vs Drone

Flight logs and how to keep record of flight times.

Review the FAA Remote Pilot Small Unmanned Aircraft Systems Study Guide

Two categories of airspace, Controlled and Uncontrolled:

Controlled Airspace: Class B, C, D, E.

Uncontrolled airspace: Class G

Breakdown airspace types and how to determine what type of airspace on a chart.

Chart symbols including VOR's

Sectional Chart vs TAC and scale

COA and ECOA:

Review of our COA and what an ECOA is.

1100 METAR's and TAF's

1200 Lunch break

1300 Practical flight exercises:

Initial flight training maneuvers guide with each person flying the maneuvers

twice.

**Day Two** 0800-1200

0800 Review of airspace and practical exercises

Chart reading

Latitude and longitude on a chart, isogonic lines, special use airspace; prohibited areas, restricted areas, warning areas, MOA's, MTR's, Parachute jump operations, wildlife areas / wilderness areas, TFR's, cloud clearance and visibility requirements for VFR operations.

Plotting exercises

**ECOA** exercises

Obtaining a NOTAM

NOTAM exercises

Skyvector and latlong.net exercises

1100 Review of METAR's and TAF's

1200 Lunch

1300 Practical flight exercises:

Initial flight training maneuvers guide for those who did not complete the two minimum flights at the last training. Begin advanced flight maneuvers.

# **Day Three** 0800-1200

0800 Weather:

Atmosphere Pressure

Density altitude Performance

Wind Air masses

Humidity
Stability / ingr

Stability / instability
Temperature/dew point

Clouds

Thunderstorms

Weather in relationship with METAR's and TAF's

Weather minimums for flying

Night flying

Night limitations and illusions

FLIR camera and FLIR interpretation

1200 Lunch

Practical exercises and advanced flight maneuvers

**Day Four** 0800-1200

0800 UAS weights

Preflights

Battery issues Maintenance

Waivers and registration

Crew Resource Management Hazardous attitudes

Aeronautical decision making

Physiological factors

Aircraft loading and performance

Aerodynamics

Stalls and load factors

Airport operations

Patterns

CTAF and UNICOM Chart supplements US

Accident reporting and injuries

Overall review and practice tests

1200 Lunch

Practical exercises and advanced flight maneuvers.